

ECS Configuration Change Request

Page 1 of

Page(s)

1. Originator Robert Cole	2. Log Date: 9/5/02	3. CCR #: 02-0757	4. Rev: —	5. Tel: 301-925-0799	6. Rm #: 2110C	7. Dept. SE/HW
8. CCR Title: Reconfigure the NSIDC SAN filesystem						
9. Originator Signature/Date Robert Cole /s/ 9/5/02			10. Class II	11. Type: CCR	12. Need Date: 9/30/02	
13. Office Manager Signature/Date Randy Haynes /s/ 9/5/02			14. Category of Change: Update ECS Baseline Doc.		15. Priority: (If "Emergency" fill in Block 27). Routine	
16. Documentation/Drawings Impacted: N/A			17. Schedule Impact:		18. CI(s) Affected: SANHW	
19. Release Affected by this Change: N/A		20. Date due to Customer:		21. Estimated Cost: None - Under 100K		
22. Source Reference: <input type="checkbox"/> NCR (attach) <input type="checkbox"/> Action Item <input type="checkbox"/> Tech Ref. <input type="checkbox"/> GSFC <input type="checkbox"/> Other:						
23. Problem: (use additional Sheets if necessary) The NSIDC SAN filesystem (/datapool) configuration deviates from the configuration currently extant at the other DAACs. Due to space efficiency considerations, the filesystem configuration has been changed from a striped to round-robin configuration. Specifically, the change to be implemented is to rebuild the QFS filesystem based on 'mr' rather than 'g' devices.						
24. Proposed Solution: (use additional sheets if necessary) See next sheet.						
25. Alternate Solution: (use additional sheets if necessary) Leave the NSIDC configuration as a deviation from the rest of the program. The space inefficiency will be minimal due to the small number of devices in the current NSIDC configuration.						
26. Consequences if Change(s) are not approved: (use additional sheets if necessary) The NSIDC configuration will not match the rest of the ECS site configurations.						
27. Justification for Emergency (If Block 15 is "Emergency"):						
28. Site(s) Affected: <input type="checkbox"/> EDF <input type="checkbox"/> PVC <input type="checkbox"/> VATC <input type="checkbox"/> EDC <input type="checkbox"/> GSFC <input type="checkbox"/> LaRC <input checked="" type="checkbox"/> NSIDC <input type="checkbox"/> SMC <input type="checkbox"/> AK <input type="checkbox"/> JPL <input type="checkbox"/> EOC <input type="checkbox"/> IDG Test Cell <input type="checkbox"/> Other						
29. Board Comments:				30. Work Assigned To:		31. CCR Closed Date:
32. EDF/SCDV CCB Chair (Sign/Date):		Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS				
33. M&O CCB Chair (Sign/Date): /s/ G. G. Gavan 9/10/02		Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS				
34. ECS CCB Chair (Sign/Date):		Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS				

ADDITIONAL SHEET

CCR #: 02-0757 **Rev:** — **Originator:**

Telephone: **Office:**

Title of Change:

1. Backup any data in /datapool that needs to be available after the filesystem reconfiguration. All data resident in the filesystem will be lost when the new filesystem is built on the existing disks.

2. Unmount the SAN filesystem (n0sas01:/datapool) on all NFS clients.

3. Unshare /datapool from n0sas01.

4. Unmount /datapool on n0sas01.

5. Modify /etc/opt/LSCsamfs/mcf as follows:

**** Original MCF file ****

```
qfs1      10  ma  qfs1
/dev/dsk/c4t0d0s6  11  mm  qfs1  on  /dev/rdisk/c4t0d0s6
/dev/dsk/c3t0d1s6  12  g0  qfs1  on  /dev/rdisk/c3t0d1s6
/dev/dsk/c4t0d2s6  13  g0  qfs1  on  /dev/rdisk/c4t0d2s6
```

**** New MCF file ****

```
qfs1      10  ma  qfs1
/dev/dsk/c4t0d0s6  11  mm  qfs1  on  /dev/rdisk/c4t0d0s6
/dev/dsk/c3t0d1s6  12  mr  qfs1  on  /dev/rdisk/c3t0d1s6
/dev/dsk/c4t0d2s6  13  mr  qfs1  on  /dev/rdisk/c4t0d2s6
```

6. Modify /etc/vfstab as follows:

**** Original /datapool mount parameters ****

```
qfs1      -      /datapool  samfs  -  yes  stripe=1
```

**** New /datapool mount parameters ****

```
qfs1      -      /datapool  samfs  -  yes  stripe=0
```

7. Rebuild the QFS filesystem by executing the following command:

```
/opt/LSCsamfs/sbin/sammkfs -a 576 qfs1
```

8. Mount and share /datapool on n0sas01.

9. Restore /datapool client mounts.

10. Restore any data to /datapool that had been backed up.